

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	31	permanent adj magnet near2 coil with (angl\$3 or slant\$3 or tilt\$3 or aslant\$3)	US-PGPUB	OR	ON	2006/06/01 15:05
S1	69	liang-feng.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/20 13:56
S2	10	degner-michael.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 13:33
S3	47	degner-michael-\$.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 13:34
S4	39	"4779582"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 14:18
S5	0	jp-14130510-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 13:38
S6	1	fr-2812024-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 13:41
S7	1	fr-2812025-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 13:40
S8	2	fr-2820238-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 13:40
S9	2	ep-1174595-\$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 13:41
S10	893	123/90.11,90.24.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:34
S11	3863	251/129.07,129.09,129.1,129.15,129.16.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:35

## EAST Search History

S12	3433	335/227,229,255,256,268,295,302,304,306.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:35
S13	327	336/110.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:35
S14	8230	S10 or S11 or S12 or S13	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:36
S15	167	S10 and (S11 or S12 or S13)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:36
S16	33	S15 and (permanent\$1magnet or permanent near2 magnet)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:39
S17	1175	(permanent\$1magnet or permanent adj magnet) near3 (angl\$3 or slant\$3 or lean\$3 or non\$1parallel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/08/25 09:39
S18	30	S14 and S17	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:44
S19	17	S17 and ("123"/\$ or "251"/\$).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:44
S20	15	S19 not S18	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:48
S21	781	123/90.11.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:48
S22	125	123/90.24.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:48
S23	13	S21 and S22	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/01 15:48

## EAST Search History

S24	895	123/90.11,90.24.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 10:07
S25	3865	251/129.07,129.09,129.1,129.15, 129.16.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 10:07
S26	3434	335/227,229,255,256,268,295,302, 304,306.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 10:07
S27	327	336/110.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 10:07
S28	8235	S24 or S25 or S26 or S27	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 10:07
S29	289	S28 and (permanent\$1magnet or permanent adj magnet or magnet) with (angl\$3 or slant\$3 or lean\$3 or non\$1parallel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/20 14:05
S30	1	("6292078").URPN.	USPAT	OR	ON	2004/11/02 10:26
S31	3	("2280437"   "5166654").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2004/11/02 10:26
S32	121	S28 and (permanent\$1magnet or permanent adj magnet or magnet) with (inclin\$5 or diagonal\$2 or oblique\$2 or tilt\$3 or cant\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:47
S33	70	S32 not S29	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 11:20
S34	261	(permanent\$1magnet or permanent adj magnet or magnet) with (angl\$3 or slant\$3 or lean\$3 or non\$1parallel or inclin\$5 or diagonal\$2 or oblique\$2 or tilt\$3 or cant\$3) same (armature or plate) same (electromagnet or electro\$1magnet)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:50
S35	895	123/90.11,90.24.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:50

## EAST Search History

S36	3865	251/129.07,129.09,129.1,129.15, 129.16.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:50
S37	3434	335/227,229,255,256,268,295,302, 304,306.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:50
S38	327	336/110.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:50
S39	8235	S35 or S36 or S37 or S38	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:50
S40	289	S39 and (permanent\$1magnet or permanent adj magnet or magnet) with (angl\$3 or slant\$3 or lean\$3 or non\$1parallel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:50
S41	121	S39 and (permanent\$1magnet or permanent adj magnet or magnet) with (inclin\$5 or diagonal\$2 or oblique\$2 or tilt\$3 or cant\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:50
S42	251	S34 not (S40 or S41)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:50
S43	3	S42 and "123"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:53
S44	4	S42 and "251"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:54
S45	31	S42 and "335"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:58
S46	0	S42 and "336"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:58
S47	2	S42 and "361"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 14:11

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S48	212	S42 not (S43 or S44 or S45 or S47)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 13:59
S49	4	S42 and "318"/\$.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/11/02 14:11
S50	927	123/90.11,90.24.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:28
S51	3961	251/129.07,129.09,129.1,129.15, 129.16.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:28
S52	3483	335/227,229,255,256,268,295,302, 304,306.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:28
S53	329	336/110.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:28
S54	8408	S50 or S51 or S52 or S53	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:28
S55	1226	S54 and magnet with coil	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:28
S56	132	S55 and coil near3 axis	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:36
S57	12	S56 and (magnet near3 (angl\$3 or slant\$3 or lean\$3 or non\$1parallel))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:32
S58	565	S55 and (S50 or S51)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:33
S59	45	S55 and (magnet near3 (angl\$3 or slant\$3 or lean\$3 or non\$1parallel))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:34

## EAST Search History

S60	6	S59 and (S50 or S51)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:33
S61	8	(S50 or S51) and (magnet near3 (angl\$3 or slant\$3 or lean\$3 or non\$1parallel))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:35
S62	390	(S50 or S51) and (permanent adj magnet)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:35
S63	32	S62 and coil near3 axis	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/10 12:36
S64	827	123/90.11.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/08/24 14:01
S65	130	123/90.24.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/08/24 13:38
S66	14	S64 and S65	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/08/24 13:38
S67	7	("4984541"   "5115772"   "5129369"   "5818680"   "6039014"   "6176207"   "6216653").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/08/24 13:48
S68	0	("6684829").URPN.	USPAT	OR	ON	2005/08/24 15:03
S69	4	("4515343"   "5692463"   "5762035"   "6070853").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/08/24 15:03
S70	3	("6615780").URPN.	USPAT	OR	ON	2005/08/24 15:13
S71	10	("4971116"   "5497738"   "5779220"   "5836001"   "5848613"   "6179005"   "6189519"   "6289748"   "6308672"   "6347616").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/08/24 15:13
S72	10	("6047672").URPN.	USPAT	OR	ON	2005/08/24 15:59
S73	9	("4706619"   "4794891"   "5636601"   "5671705"   "5748433"   "5775276"   "5782211"   "5791305"   "5964192").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/08/24 16:01

## EAST Search History

S74	3388	permanent adj magnet and valve near3 actuat\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/08/25 09:44
S75	13	((permanent\$1magnet or permanent adj magnet) near3 (angl\$3 or slant\$3 or lean\$3 or non\$1parallel)) and valve near3 actuat\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/08/25 09:40
S76	393	permanent adj magnet and valve near3 actuat\$3 same engine same (intake or inlet or exhaust or outlet)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/08/25 09:45
S77	827	123/90.11.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/08/25 09:45
S78	335	S76 not S77	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/08/25 09:45
S79	30	"4912746"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:08
S80	3141	310/12.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:08
S81	378	310/30.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:08
S82	27	S80 and S81	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:11
S83	3492	S80 or S81	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:11
S84	6820	coil same core same (armature or plate) same magnet	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:12
S85	194	S83 and S84	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:12

## EAST Search History

S86	3471	coil same core same (armature or plate) same permanent adj magnet	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:13
S87	121	S83 and S86	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:14
S88	34	coil same core same (armature or plate) same (magnet near2 (angl\$3 or tilt\$3 or slant\$3 or lean\$3 or non\$1parallel))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:19
S89	1	S83 and S88	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:14
S90	9	valve near2 actuat\$3 and ((armature or plate) same (magnet near2 (angl\$3 or tilt\$3 or slant\$3 or lean\$3 or non\$1parallel)))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/12/11 11:19
S91	1	(US-4912746-\$).did.	USPAT	OR	ON	2006/03/06 15:15
S92	1	S91 and coil	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/06 15:15
S93	3	(US-6615780-\$ or US-6047672-\$ or US-4912746-\$).did.	USPAT	OR	ON	2006/03/16 11:57
S94	2	S93 and magnet	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 11:58
S95	2	"6679204"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 12:05
S96	4	"6216653"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/16 12:07
S97	3	("6615780").URPN.	USPAT	OR	ON	2006/03/16 12:10
S98	10	("4971116"   "5497738"   "5779220"   "5836001"   "5848613"   "6179005"   "6189519"   "6289748"   "6308672"   "6347616").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/16 12:11
S99	15	("5779220").URPN.	USPAT	OR	ON	2006/03/16 12:14

## EAST Search History

S10 0	7	("2629007"   "4044324"   "4250922"   "4919390"   "5020505"   "5261637").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/16 12:16
S10 1	8	(US-6216653-\$ or US-6684829-\$ or US-4152570-\$ or US-5351934-\$ or US-6615780-\$ or US-6047672-\$ or US-5779220-\$ or US-4912746-\$). did.	USPAT	OR	ON	2006/03/18 18:06
S10 2	6	S101 and magnet	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/18 18:06
S10 3	64	"4829947"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/20 13:57
S10 4	11	"4788968"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/20 13:57
S10 5	7	("4788968").URPN.	USPAT	OR	ON	2006/03/20 14:03
S10 6	13	("2766750"   "3065366"   "3096758"   "3129347"   "3503395"   "3984708"   "4069816"   "4549535").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/20 14:04
S10 7	1799	310/15,24,30.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/20 14:04
S10 8	51	S107 and (permanent\$1magnet or permanent adj magnet or magnet) with (angl\$3 or slant\$3 or lean\$3 or non\$1parallel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/20 14:05
S10 9	14	("5117142"   "5276372"   "5347186"   "5598044"   "5693991"   "5696413"   "5734209"   "5788003"   "5854521"   "5924975"   "6079960"   "6246561"   "6326706"   "6501357").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/03/20 14:20
S11 0	1	(US-6717297-\$).did.	USPAT	OR	ON	2006/03/20 15:13
S11 1	1	S110 and gap	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/20 15:13